

REMARKS

Reconsideration of the above-identified patent application in view of the amendment above and the remarks below is respectfully requested.

No claims have been canceled in this paper. Claim 1 has been amended in this paper. New claim 23 has been added in this paper. Therefore, claims 1-23 are pending. Of these claims, claims 14-16 have been withdrawn from further consideration as being drawn to a nonelected invention. Accordingly, claims 1-13 and 17-23 are under active consideration.

Claims 1, 5-13, and 19-22 stand rejected under 35 U.S.C. 103(a) “as being unpatentable over Blanton (US 987106).” In support of the rejection, the Patent Office states the following:

Blanton discloses a nut comprising a nut body (16) and a straining ring (13). The nut body including a neck (17) receiving the straining ring “shoved” thereon and being reversible. The straining ring has hexagonal contour and includes grooves (15) being in a circular arc which cumulatively extend 360° with a complementary number of cams (18) formed on the neck of the nut body. Blanton discloses three cams thus each would extend greater than 60°. However, Blanton discloses that any number of cams may be provided depending upon the nut faces (on page 2, the paragraph bridging the columns) therefore, it would have been obvious for the person of ordinary skill in the art to use a nut requiring 6 or more cams, which equates 60° or less, depending upon the particular application of the nut. Indeed, it is well known to vary the number of faces on a nut for optimal engagement with a fastener for a particular application. The claimed ranges/preferred dimensions would have been recognized depending upon the particular use of the invention. It is well known to vary the size of fasteners depending upon the particular application.

Applicant respectfully traverses the subject rejection. Claim 1, from which claims 5-13 and 19-22 depend, has been amended herein and now recites “[a] securing nut comprising a nut body and a straining ring rotationally arranged on the nut body, the nut body having a neck, the straining ring being shoved onto the neck of the nut body and reversibly secured thereto by clamping, an inner

surface of the straining ring having at least two grooves, each of the at least two grooves being a circular arc, the at least two grooves cumulatively extending across an entire angular range of 360°, an outer surface of the neck having a plurality of cams corresponding in number to the number of grooves, each cam being associated with a groove and extending across an angular range of less than 60°, wherein said neck is elastic and is reversibly deformable between a round contour and a non-round contour by compression of said neck by said straining ring.”

Support for the above amendment of claim 1 may be found in the present specification, for example, at page 3, lines 14-22; at page 11, lines 1-12; and at page 12, 19-21.

Claim 1 is not rendered obvious over Blanton for at least the reason that Blanton does not teach or suggest a securing nut that comprises, among other things, an elastic neck that is reversibly deformable between a **round contour** and a **non-round contour** by compression of said neck by said straining ring. Blanton, by contrast, is directed at a nut lock that comprises a nut 13 and a locking piece 16. Putting aside for the moment the fact that the Patent Office is contending that Blanton locking piece 16 corresponds to the claimed nut body, that Blanton cylindrical portion 17 corresponds to the claimed neck, and that Blanton nut 13 corresponds to the claimed straining ring (despite the fact that Blanton, itself, refers to its element 13 as a nut), Applicant points out that the claimed securing nut is still patentably distinguishable over Blanton because Blanton locking piece 16 is not reversibly deformable between a **round contour** and a **non-round contour** by compression from nut 13. Instead, as seen best in Figs. 4 and 5 of Blanton, even when locking piece 16 is moved from its unlocked position to its locked position, cylindrical portion 17 remains round in contour (owing, at least in part, to the presence of slot 19).

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 1-13 and 17-21 stand rejected under 35 U.S.C. 103(a) “as being unpatenable over Stencel (US 4,260,005) in view of Williamson (US 4,408,936).” In support of the rejection, the Patent Office states the following:

As best seen in Figs. 4 and 6, Stencel discloses a securing nut comprising a straining ring (34) having three grooves (38) each extending 120 degrees to total an entire 360 degrees and, a threaded (at 18) nut body (10) having a neck (52) having three cams (28) in the form of curved cams having a curved gradient which extend less than 60°, in the range of 45°, which are clamped to form a “linear gradient”. The straining ring being “shoved” onto the nut and would be secured thereto by a clamping force as it engages the cams. Stencel does not disclose the grooves being in the form of a circular arc and forming a “linear gradient”. As seen in Figs. 8 and 9, Williamson discloses grooves (63) formed in a circular arc and having a “linear gradient.” At the time the invention was made, it would have been obvious for one of ordinary skill in the art to form the grooves of Stencel in a circular arc as disclosed in Williamson to improve the ability to clamp the cams. The circular arc in a linear gradient provides for a more gradual incline to reduce the effort to deform and clamp the cams. The claimed ranges/preferred dimensions would have been recognized depending upon the particular use of the invention. It is well known to vary the size of fasteners depending upon the particular application.

Later in the Office Action, the Patent Office states the following:

The examiner agrees with applicant that Stencel does not disclose the grooves on the straining ring being formed in a circular arc thus obviating the section 102(b) rejection relying on Stencel. However, the reference to Williamson has been applied to cure the deficiency of Stencel.

Applicant also argues that Stencel does not meet the limitation of the ring being “reversibly secured” since it would not be possible to loosen the nut after installed. In response, the examiner will agree that it is not intended for the nut to be loosened. However, the language of the “reversibly secured” in the context of the claims only require the *straining ring* to be reversibly secured which the straining ring (or tool) of Stencel would be after installing the nut. (Emphasis in original.)

Applicant respectfully traverses the subject rejection. As noted above, claim 1, from which claims 2-13 and 17-21 depend, has been amended herein and now recites “[a] securing nut comprising a nut body and a straining ring rotationally arranged on the nut body, the nut body having a neck, the straining ring being shoved onto the neck of the nut body and reversibly secured thereto by clamping, an inner surface of the straining ring having at least two grooves, each of the at least two grooves being a circular arc, the at least two grooves cumulatively extending across an entire angular range of 360°, an outer surface of the neck having a plurality of cams corresponding in number to the number of grooves, each cam being associated with a groove and extending across an angular range of less than 60°, wherein said neck is elastic and is reversibly deformable between a round contour and a non-round contour by compression of said neck by said straining ring.”

The applied combination of Stencel and Williamson does not render obvious claim 1 for at least the reason that Stencel and Williamson, taken individually or in combination, do not teach or suggest a securing nut comprising, among other things, an elastic neck that is **reversibly deformable** between a round contour and a non-round contour by compression of said neck by said straining ring.

Instead, Stencel is directed at a combination of a locking collar 10 and a shear pin 12 in which the locking collar 10 has a plurality of lobes 28 and the shear pin 12 has a plurality of flats 22. In use, locking collar 10 is inserted over shear pin 12, and a driver 34 is inserted around collar 10. As driver 34 is rotated, three flat sides 38 of driver 34 engage lobes 28 and **permanently deform** lobes 28 so that the material therefrom is displaced into the flats 22 of shear pin 12. As

Williamson, which is relied upon by the Patent Office for allegedly teaching the grooves on a straining ring being formed in a circular arc, fails to cure all of the deficiencies noted above in connection with Stencel.

The comments made by Applicant in previous communications to the Patent Office regarding the deficiencies of Stencel and/or Williamson are incorporated herein by reference.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claim 23 depends from claim 1 and is patentable over the applied references for at least the same reasons given above for claim 1. In addition, claim 23 is further patentable for the reason that it recites that the neck is reversibly deformable between a round contour and a triangular contour by compression of said neck by said straining ring. This feature is not taught or suggested by the references.

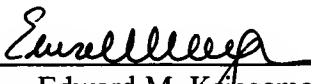
In conclusion, it is respectfully submitted that the present application is now in condition for allowance. Prompt and favorable action is earnestly solicited.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is

required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.


Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 29, 2005.


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